

11 Apr 1995
WPNSSB

TE2NR-F

TESTER, SEMICONDUCTOR

1. GENERAL. This procurement requires a solid-state test set that presents a voltage versus current display of electronic components under test.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications.

3. OPERATIONAL REQUIREMENTS. The equipment shall be capable of displaying the electronic signature of discrete and integrated circuit semiconductor junctions, capacitance, inductance, and resistance in and out of circuit.

3.1 Display. The equipment shall be provided with an integral CRT or liquid crystal display.

3.2 Input channels. The equipment shall be provided with channels A and B, and alternating A and B.

3.3 Test signal. An internally generated transformer-coupled sine wave test signal shall be provided.

3.3.1 Frequencies. Line frequency, 400 Hz and 2 kHz.

3.4 Gate signal generator. The equipment shall be provided with a variable pulse/dc generator as detailed below.

3.4.1 Output level. -5V to +5V.

3.4.2 Duty cycle. 0% (dc) to 50%.

3.4.3 Current limit. 50 mA maximum.

3.4.4 Synchronization. The pulse signal shall be synchronized with the sine wave test signal.

3.4.5 Number of outputs. 2.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal power source requirements are invoked. Maximum power consumption: 20W.

4.2 Weight. 10 kg (22 lb) maximum.

4.3 Accessories. Safety-designed test probes in accordance with MIL-T-28800 and other test leads necessary for comparison testing shall be provided.

4.4 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.